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# THE SPECIES OF HOPLOPHYLLUM FAMILY DISTRIBUTED IN THE SOUTH-WESTERN GISSAR DISTRICT

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## **ABSTRACT**

Our nature is rich in a variety of wonders: from small animals and plants to the wonders of the flora, which is famous for its greatness. In this article we will consider one of these natural wonders, the Hoplophyllum family, which is widespread in Gissar district. We will talk in detail about its types, properties and significance. We will pay special attention to its medical benefits.

**Keywords:** Gissar district, hoplophyllum, Rutaceae, Daurian whole-leaf, Haplophyllum tenue, Haplophyllum tuberculatum, gynecological disorders.

## 1. Introduction

The district is divided into Zarafshan in the north, Surkhandarya in the east, Amudarya in the south and Kashkadarya in the west. This district is located between Tianshan and the Pamirs. The mountains were raised during the Gersen Mountain formation phase, then re-ascended during the descending alpine fold. Mount Chakilkalon ends at the Takhta-Karacha pass (1630 m high). From here, to the west, Mount Qoratepa continues. This mountain is composed of intrusive rocks, the highest point of which is Kamkuton Peak (2195m). The Qoratepa Mountains rise again in the south of Kattakorgan to form Zirabulak Mountain, which stretches 100 km to the west, with the highest point in the east being Zindontog Peak at 1,116 m.

## 2. Main part

Mount Zirabulak is separated from Mount Ziyovuddin by the Karnob Pass in the west. The highest part of this mountain is Dartkol (914 m) east of Navoi. Both mountains are connected to the Zarafshan valley in the north and the Kashkadarya valley in the south.

The part of Gissar, west of the Mura pass (3799 m), faces Uzbekistan. Gissar ridge 68gr. shk. she is. from the upper reaches of the Kishtut River (a tributary of the Topolon River).

1) Mount Machitli, which is the watershed between the Kishtut and Karatag rivers to the south-west. Only the western part of this mountain is within this district, the highest point being 3476m.

The part that runs north and northwest along the border is a direct continuation of the Gissar ridge of Mount Hazrat Sultan. Hazrati Sultan Mountain continues to the upper reaches of the Aksu River valley and then connects with the Zarafshan ridge through the Sumsar and Shertog mountains. The highest point of the whole district and Uzbekistan - Independence Peak (4643 m) is in the upper reaches of the rivers Dikhandarya (left tributary of the Topolon River) and Bodomistan (right tributary of the Karatag River), which begin from this massif. To the southwest of the Gissar ridge, a series of branches parallel to each other emerges. These networks are the watershed between Kashkadarya and Surkhandarya. The largest of them are Chakchar, Boysun, Osmontarosh, Beshnov mountains. The largest of these is the Chakchar ridge. (Khorasan peak 3744 m).

Mount Osmontarosh (3700 m) separates from Chakchar mountain to the south-west. At the confluence of these two mountains are the Seversov (2.3 km long, 550 m wide, 1.38 km2) and Botirboy (2.2 km long, 1.3 km2) glaciers. To the south of Mount Osmontarosh is Mount Beshnov, separated by the Tankhoz River. In the southwest of Chakchar mountain there are such branches as Eshakmaydon, Toydala, Khantakhta, Maidanon.

To the east of Mount Chakchar is Mount Boysun. It is called Kushtang (3273 m) in the north-east, Ketmonchopti (3168 m) in the middle and Suvsiztog in the south. To the south of Mount Boysun is Mount Kohitang, which has a 4 km long cave. To the east of Mount Boysun is Surkhantog (3722 m) parallel to it. To the south of this mountain are the Kelif-Sherabad (1126 m), which runs from northeast to southwest, and the Sherabad-Sariqamish lowlands (1216 m). The Sherabad River flows through them. From southwest to northeast there are Gazlafon, Beshkiz, Karabunda, Takasakradi, Yetimkalos mountains.

Vegetation in the county varies from south to north and from the plains to the mountains. In the hottest and driest parts of the county, wormwood, ephemeral color, sagebrush, sagebrush, peas, and other heat-tolerant plants grow. In the sands, kandym, white saxophone, cherkez, tarakbosh, yaltirbosh, in the river valleys, in the tugai, yulgun, jiida, turongil, poplar, reed, savagich are widespread.

There are many hills and mountain meadows in the district. The hills are dominated by ephemeral plants and wormwood, sagebrush and fungus. Above it (from 1200 m to 4000 m) in the basins of the Sangardak Topolondarya and other rivers there are also trees and shrubs. Spruce, maple, pistachio, walnut, barberry and other trees grow here. Above the trees, mountain meadows cover a large area. Due to its arid subtropical climate, the district grows pomegranates, figs, dates, sugar cane, citrus and other heat-loving fruit trees and crops. The subtropical botanical garden in Denau is home to many tropical fruits and trees. If we take a closer look at the species of hoplophyllum which spreads in the area of southern west Gissar, a popular medicinal plant in the county, we will not miss its wonderful properties.

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Haplophyllum

Family Root (Rutaceae)

Perennial grasses and shrubs be with whole or 3-cut leaves. The flowers are correct, bisexual. There are 5 sepals, 5 petals, they are marigold, usually yellow, less often red with a yellow edge. The fruit is a 2-5-celled capsule. Plants contain essential oil.

Kinds:

Bourgeau whole leaf (Haplophyllum bourgaei)

The plant is green, herbaceous with several, ascending stems with little noticeable glands, 15-30 cm tall. Leaves whole, obverse-lanceolate, gradually and long narrowed towards the base into a petiole, sharp, with pinpoint glands, glaucous below. Inflorescence corymbose, dense, linear bracts. Sepals are triangular-ovate, acutate, hairy. Petals are yellow, fluffy on the back, broadly ovoid, obtuse, concave with a very short nail. Bloom is in June-August.

Daurian whole-leaf (Haplophyllum dauricum)

The plant is green, glabrous, multi-stemmed, covered with pinpoint glands, densely leafy stems, 10-25 cm tall. Leaves are sessile, gradually narrowed towards the base, finely crenate. The lower leaves are inversely oblong-lanceolate or obtuse-oblong, obtuse. The middle and upper leaves are obverse-lanceolate or lanceolate, acute or pointed. The inflorescence is few-flowered, corymbose. Sepals are falling, triangular-ovate. Petals are yellow, glabrous, elongated-elliptical, lanceolate, rapidly tapering into a short nail, 0.6-0.8 cm long. It blooms in June-July.

Broad-leaved whole leaf (Haplophyllum latifolium)

The plant is green, glabrous, covered with glands, 25-60 cm tall, with a powerful, corymbose-branched stem. The leaves are almost sessile, whole, oblong-lanceolate. Oblong or broadly oblong, sometimes almost round. The inflorescence is paniculate corymbose, multi-flowered. Sepals are almost round, obtuse, glabrous. Petals glabrous, with glands, dark yellow, oblong, suddenly narrowed into a short nail. Blossoming is in May-June.

Fragrant whole leaf (Haplophyllum suaveolens)

The plant is herbaceous, green or bluish with several, at the base, ascending, simple stems, 10-30 cm tall. Leaves whole, sessile, obverse-lanceolate or obverse-oblong-lanceolate, long narrowed towards the base, sharp, with punctate glands. The inflorescence is corymbose, very dense. Sepals are ovate or oblong, slightly serrated, acute often ciliate. Petals are yellow, glabrous, ovate, obtuse, with a very short nail. Blossoming is in May-August.

Thin whole leaf (Haplophyllum tenue)

The plant is bluish, herbaceous, 25-40 cm tall, covered with punctate glands with a few, rod-like, ascending stems, simple and naked. Leaves whole, glabrous, obversely lanceolate towards the base, long and gradually narrowed, almost petiolar, sharp. The upper leaves are reduced, almost linear. The inflorescence is corymbose, dense. Sepals are ovate, obtuse, hairy. Petals are yellow, glabrous, oblong, obtuse, gradually tapering into a short nail. Blooming is in June.

In addition to what I have just said that Haplophyllum species: were used in Iraq, as a salve for wounds. The decoction was used as a cure in stomach-ache for children. Haplophyllum species were suggested to have activity on central nervous system. For instance, the leaves of these plants were given to children as an infusion with vinegar for the treatment of convulsion and other nervous disorders. However, Haplophyllum tuberculatum was used traditionally in Algeria for many complains as antiseptic, for injuries and ulcers, as calming, hypnotic neurological, for infertility, diabetes, bloating, fever, liver disease, otitis, rheumatism, as vermifuge, for obesity, constipation, colon, diarrhea, gases, hypertension, menstrual pain, cardiac disease, scorpion stings, flu, vomiting, throat inflammation, tonsillitis, cough and loss of appetite. In the north of Oman, the juice expressed from the leaves was used as a remedy for headaches and arthritis. In Saudi Arabia, Haplophyllum tuberculatum was used traditionally for headaches and arthritis, to remove warts and freckles from the skin and to treat skin discoloration, infections and parasitic diseases. In Sudan the herb was used as an antispasmodic, to treat allergic rhinitis, gynecological disorders, asthma and breathing difficulties.

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